

On page 12, lines 24-25, please delete "150 mM NaCl, 15 mM trisodium citrate" and insert therefor: --750 mM NaCl, 75 mM trisodium citrate--.

On page 12, line 26, please delete "20 g/ml" and insert therefor --20 µg/ml--.

***In the Claims:***

Please cancel, without prejudice to or disclaimer of the subject matter thereof, claims 1-18, 20, and 22-34.

Please add the following claims 35 to 224:

--35. An isolated polynucleotide comprising a nucleic acid at least 90% identical to a reference nucleic acid encoding amino acids 1 to 360 of SEQ ID NO:2.

36. The isolated polynucleotide of claim 35, wherein said nucleic acid is at least 95% identical to said reference nucleic acid.

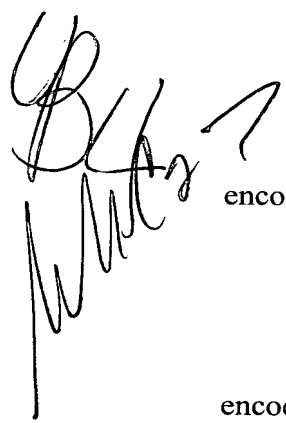
37. The isolated polynucleotide of claim 36, which comprises a nucleic acid encoding amino acids 1 to 360 of SEQ ID NO:2.

38. The isolated polynucleotide of claim 37, which comprises nucleotides 283 to 1362 of SEQ ID NO:1.

39. The isolated polynucleotide of claim 35, wherein said reference nucleic acid encodes amino acids -50 to 360 of SEQ ID NO:2.

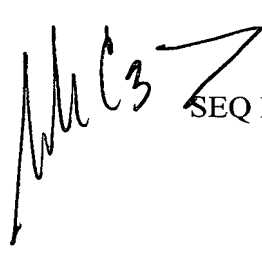
40. The isolated polynucleotide of claim 39, which comprises a nucleic acid encoding amino acids -50 to 360 of SEQ ID NO:2.

41. The isolated polynucleotide of claim 40, which comprises nucleotides 133 to 1362 of SEQ ID NO:1.

 42. The isolated polynucleotide of claim 39, wherein said reference nucleic acid encodes amino acids -51 to 360 of SEQ ID NO:2.

43. The isolated polynucleotide of claim 42, which comprises a nucleic acid encoding amino acids -51 to 360 of SEQ ID NO:2.

44. The isolated polynucleotide of claim 43, which comprises nucleotides 130 to 1362 of SEQ ID NO:1.

 45. The isolated polynucleotide of claim 42, wherein said reference nucleic acid is SEQ ID NO:1.

46. The isolated polynucleotide of claim 45 which comprises SEQ ID NO:1.

47. The isolated polynucleotide of claim 35, wherein said nucleic acid encodes a polypeptide which binds a Tumor Necrosis Factor (TNF) ligand.

48. The isolated polynucleotide of claim 35, wherein said nucleic acid encodes a polypeptide which induces apoptosis.

49. The isolated polynucleotide of claim 35, further comprising a heterologous polynucleotide.

50. The isolated polynucleotide of claim 49, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

51. The isolated polynucleotide of claim 50, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.

52. The isolated polynucleotide of claim 51, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

53. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 35 into a vector.

54. A vector comprising the isolated polynucleotide of claim 35.

55. The vector of claim 54, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

56. A host cell comprising the isolated polynucleotide of claim 35.

57. The host cell of claim 56, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

58. A host cell comprising the isolated polynucleotide of claim 47.

59. The host cell of claim 58, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

60. A method of using the host cell of claim 58 to screen for ligand binding, comprising culturing said host cell under conditions such that a polypeptide encoded by said isolated polynucleotide is expressed, contacting said polypeptide with said ligand, and detecting binding of said ligand to said polypeptide.

61. A method of producing a polypeptide comprising culturing the host cell of claim 58 under conditions such that said polypeptide is expressed, and recovering said polypeptide.

62. An isolated polynucleotide comprising a nucleic acid at least 90% identical to a reference nucleic acid encoding amino acids 1 to 133 of SEQ ID NO:2.

63. The isolated polynucleotide of claim 62, wherein said nucleic acid is at least 95% identical to said reference nucleic acid.

64. The isolated polynucleotide of claim 63, which comprises a nucleic acid encoding amino acids 1 to 133 of SEQ ID NO:2.

65. The isolated polynucleotide of claim 64, which comprises nucleotides 283 to 681 of SEQ ID NO:1.

66. The isolated polynucleotide of claim 62, wherein said nucleic acid encodes a polypeptide which binds a TNF ligand.

67. The isolated polynucleotide of claim 62, wherein said nucleic acid encodes a polypeptide which induces apoptosis.

68. The isolated polynucleotide of claim 62, further comprising a heterologous polynucleotide.

69. The isolated polynucleotide of claim 68, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

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70. The isolated polynucleotide of claim 69, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.

71. The isolated polynucleotide of claim 70, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

72. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 62 into a vector.

73. A vector comprising the isolated polynucleotide of claim 62.

74. The vector of claim 73, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

75. A host cell comprising the isolated polynucleotide of claim 62.

76. The host cell of claim 75, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

77. A host cell comprising the isolated polynucleotide of claim 66.

78. The host cell of claim 77, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

79. A method of using the host cell of claim 77 to screen for ligand binding, comprising culturing said host cell under conditions such that a polypeptide encoded by said isolated polynucleotide is expressed, contacting said polypeptide with said ligand, and detecting binding of said ligand to said polypeptide.

80. A method of producing a polypeptide comprising culturing the host cell of claim 77 under conditions such that said polypeptide is expressed, and recovering said polypeptide.

81. An isolated polynucleotide comprising a nucleic acid at least 90% identical to a reference nucleic acid encoding amino acids 134 to 157 of SEQ ID NO:2.

82. The isolated polynucleotide of claim 81, wherein said nucleic acid is at least 95% identical to said reference nucleic acid.

83. The isolated polynucleotide of claim 82, which comprises a nucleic acid encoding amino acids 134 to 157 of SEQ ID NO:2.

84. The isolated polynucleotide of claim 83, which comprises nucleotides 682 to 753 of SEQ ID NO:1.

85. The isolated polynucleotide of claim 81, wherein said nucleic acid encodes a polypeptide which binds a TNF ligand.

86. The isolated polynucleotide of claim 81, further comprising a heterologous polynucleotide.

87. The isolated polynucleotide of claim 86, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

88. The isolated polynucleotide of claim 87, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.

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89. The isolated polynucleotide of claim 88, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

90. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 81 into a vector.

91. A vector comprising the isolated polynucleotide of claim 81.

92. The vector of claim 91, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

93. A host cell comprising the isolated polynucleotide of claim 85.

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94. The host cell of claim 93, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

95. A method of producing a polypeptide comprising culturing the host cell of claim 93 under conditions such that said polypeptide is expressed, and recovering said polypeptide.

96. An isolated polynucleotide comprising a nucleic acid at least 90% identical to a reference nucleic acid encoding amino acids 158 to 360 of SEQ ID NO:2.

97. The isolated polynucleotide of claim 96, wherein said nucleic acid is at least 95% identical to said reference nucleic acid.

98. The isolated polynucleotide of claim 97, which comprises a nucleic acid encoding amino acids 158 to 360 of SEQ ID NO:2.

99. The isolated polynucleotide of claim 98, which comprises nucleotides 754 to 1362 of SEQ ID NO:1.

100. The isolated polynucleotide of claim 96, wherein said nucleic acid encodes a polypeptide which induces apoptosis.

101. The isolated polynucleotide of claim 96, wherein said nucleic acid encodes a polypeptide which binds a TNF ligand.

102. The isolated polynucleotide of claim 96, further comprising a heterologous polynucleotide.

103. The isolated polynucleotide of claim 102, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

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104. The isolated polynucleotide of claim 103, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.

105. The isolated polynucleotide of claim 104, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

106. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 96 into a vector.

107. A vector comprising the isolated polynucleotide of claim 96.

108. The vector of claim 107, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

109. A host cell comprising the isolated polynucleotide of claim 96.

110. The host cell of claim 109, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

111. A host cell comprising the isolated polynucleotide of claim 100.

112. The host cell of claim 111, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

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113. A method of producing a polypeptide comprising culturing the host cell of claim 111 under conditions such that said polypeptide is expressed, and recovering said polypeptide.

114. An isolated polynucleotide comprising a nucleic acid at least 90% identical to a reference nucleic acid encoding amino acids 273 to 340 of SEQ ID NO:2.

115. The isolated polynucleotide of claim 114, wherein said nucleic acid is at least 95% identical to said reference nucleic acid.

116. The isolated polynucleotide of claim 115, which comprises a nucleic acid encoding amino acids 273 to 340 of SEQ ID NO:2.

117. The isolated polynucleotide of claim 116, which comprises nucleotides 1099 to 1302 of SEQ ID NO:1.

118. The isolated polynucleotide of claim 114, wherein said nucleic acid encodes a polypeptide which induces apoptosis.

119. The isolated polynucleotide of claim 114, wherein said nucleic acid encodes a polypeptide which binds a TNF ligand.

120. The isolated polynucleotide of claim 114, further comprising a heterologous polynucleotide.

121. The isolated polynucleotide of claim 120, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

122. The isolated polynucleotide of claim 121, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.

123. The isolated polynucleotide of claim 122, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

124. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 114 into a vector.

125. A vector comprising the isolated polynucleotide of claim 114.

126. The vector of claim 125, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

127. A host cell comprising the isolated polynucleotide of claim 114.

128. The host cell of claim 127, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

129. A host cell comprising the isolated polynucleotide of claim 118.

130. The host cell of claim 129, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

131. A method of producing a polypeptide comprising culturing the host cell of claim 129 under conditions such that said polypeptide is expressed, and recovering said polypeptide.

132. An isolated polynucleotide comprising a nucleic acid at least 90% identical to a reference nucleic acid encoding the mature amino acid sequence encoded by the cDNA clone in ATCC Deposit No. 97920.

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133. The isolated polynucleotide of claim 132, wherein said nucleic acid is at least 95% identical to said reference nucleic acid.

134. The isolated polynucleotide of claim 133, which comprises a nucleic acid encoding the mature amino acid sequence encoded by the cDNA clone in ATCC Deposit No. 97920.

135. The isolated polynucleotide of claim 132, wherein said reference nucleic acid encodes the complete amino acid sequence encoded by the cDNA clone in ATCC Deposit No. 97920.

136. The isolated polynucleotide of claim 135, which comprises a nucleic acid encoding the complete amino acid sequence encoded by the cDNA clone in ATCC Deposit No. 97920.

137. The isolated polynucleotide of claim 132, wherein said nucleic acid encodes a polypeptide which binds a TNF ligand.

138. The isolated polynucleotide of claim 132, wherein said nucleic acid encodes a polypeptide which induces apoptosis.

139. The isolated polynucleotide of claim 132, further comprising a heterologous polynucleotide.

140. The isolated polynucleotide of claim 139, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

141. The isolated polynucleotide of claim 140, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.

142. The isolated polynucleotide of claim 141, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

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143. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 132 into a vector.

144. A vector comprising the isolated polynucleotide of claim 132.

145. The vector of claim 144, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

146. A host cell comprising the isolated polynucleotide of claim 132.

147. The host cell of claim 146, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

148. A host cell comprising the isolated polynucleotide of claim 137.

149. The host cell of claim 148, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

150. A method of using the host cell of claim 148 to screen for ligand binding, comprising culturing said host cell under conditions such that a polypeptide encoded by said isolated polynucleotide is expressed, contacting said polypeptide with said ligand, and detecting binding of said ligand to said polypeptide.

151. A method of producing a polypeptide comprising culturing the host cell of claim 148 under conditions such that said polypeptide is expressed, and recovering said polypeptide.

152. An isolated polynucleotide comprising 30 contiguous nucleotides of nucleotides 284 to 1362 of SEQ ID NO:1.

153. The isolated polynucleotide of claim 152, comprising 50 contiguous nucleotides of nucleotides 284 to 1362 of SEQ ID NO:1.

154. The isolated polynucleotide of claim 152, which encodes a polypeptide which binds a TNF ligand.



155. The isolated polynucleotide of claim 152, which encodes a polypeptide which induces apoptosis.

156. The isolated polynucleotide of claim 152, further comprising a heterologous polynucleotide.

157. The isolated polynucleotide of claim 156, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

158. The isolated polynucleotide of claim 157, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.

159. The isolated polynucleotide of claim 158, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

160. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 152 into a vector.

161. A vector comprising the isolated polynucleotide of claim 152.

162. The vector of claim 161, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

163. A host cell comprising the isolated polynucleotide of claim 152.

164. The host cell of claim 163, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

165. A host cell comprising the isolated polynucleotide of claim 154.

166. The host cell of claim 165, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

167. A method of using the host cell of claim 165 to screen for ligand binding, comprising culturing said host cell under conditions such that a polypeptide encoded by said isolated polynucleotide is expressed, contacting said polypeptide with said ligand, and detecting binding of said ligand to said polypeptide.

168. A method of producing a polypeptide comprising culturing the host cell of claim 165 under conditions such that said polypeptide is expressed, and recovering said polypeptide.

169. An isolated polynucleotide comprising a nucleic acid which encodes at least 7 contiguous amino acids of amino acids 1 to 360 of SEQ ID NO:2;

wherein said at least 7 contiguous amino acids bind an antibody with specificity for the polypeptide encoded by amino acids 1 to 360 of SEQ ID NO:2.

170. The isolated polynucleotide of claim 169, wherein said nucleic acid encodes at least 15 contiguous amino acids of amino acids 1 to 360 of SEQ ID NO:2.

171. The isolated polynucleotide of claim 170, wherein said nucleic acid encodes at least 30 contiguous amino acids of amino acids 1 to 360 of SEQ ID NO:2.

172. The isolated polynucleotide of claim 169, wherein said nucleic acid encodes amino acids 11 to 59 of SEQ ID NO:2.

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173. The isolated polynucleotide of claim 169, wherein said nucleic acid encodes amino acids 68 to 103 of SEQ ID NO:2.

174. The isolated polynucleotide of claim 169, wherein said nucleic acid encodes amino acids 173 to 220 of SEQ ID NO:2.

175. The isolated polynucleotide of claim 169, wherein said nucleic acid encodes amino acids 224 to 319 of SEQ ID NO:2.

176. The isolated polynucleotide of claim 169, further comprising a heterologous polynucleotide.

177. The isolated polynucleotide of claim 176, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

178. The isolated polynucleotide of claim 177, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.

179. The isolated polynucleotide of claim 178, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

180. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 169 into a vector.

181. A vector comprising the isolated polynucleotide of claim 169.

182. The vector of claim 181, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

183. A host cell comprising the isolated polynucleotide of claim 169.

184. The host cell of claim 183, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

185. A method of producing a polypeptide comprising culturing the host cell of claim 183 under conditions such that said polypeptide is expressed, and recovering said polypeptide.

186. An isolated polynucleotide comprising a nucleic acid which hybridizes to nucleotides 284 to 1362 of SEQ ID NO:1, or the complement thereof, under conditions comprising:

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- (a) incubating overnight at 42°C in a solution consisting of 50% formamide, 5x SSC, 50 mM sodium phosphate (pH 7.6), 5x Denhardt's solution, 10% dextran sulfate, and 20 µg/ml denatured, sheared salmon sperm DNA; and
  - (b) washing at 65°C in a solution consisting of 0.1x SSC;
- wherein said nucleic acid is at least 15 nucleotides in length.

187. The isolated polynucleotide of claim 186, wherein said nucleic acid is at least 30 nucleotides in length.

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188. The isolated polynucleotide of claim 187, wherein said nucleic acid is at least 50 nucleotides in length.

189. The isolated polynucleotide of claim 188, wherein said nucleic acid is at least 150 nucleotides in length.

190. The isolated polynucleotide of claim 186, wherein said nucleic acid encodes a polypeptide which binds a TNF ligand.

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191. The isolated polynucleotide of claim 186, wherein said nucleic acid encodes a polypeptide which induces apoptosis.

192. The isolated polynucleotide of claim 186, further comprising a heterologous polynucleotide.

193. The isolated polynucleotide of claim 192, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

194. The isolated polynucleotide of claim 193, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.

195. The isolated polynucleotide of claim 194, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

196. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 186 into a vector.

197. A vector comprising the isolated polynucleotide of claim 186.

198. The vector of claim 197, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

199. A host cell comprising the isolated polynucleotide of claim 186.

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200. The host cell of claim 199, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

201. A host cell comprising the isolated polynucleotide of claim 190.

202. The host cell of claim 201, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

203. A method of using the host cell of claim 201 to screen for ligand binding, comprising culturing said host cell under conditions such that a polypeptide encoded by said isolated polynucleotide is expressed, contacting said polypeptide with said ligand, and detecting binding of said ligand to said polypeptide.

204. A method of producing a polypeptide comprising culturing the host cell of claim 201 under conditions such that said polypeptide is expressed, and recovering said polypeptide.

205. An isolated polynucleotide comprising a nucleic acid at least 90% identical to a reference nucleic acid encoding at least 30 contiguous amino acids from 1 to 360 of SEQ ID NO:2.

206. The isolated polynucleotide of claim 205, wherein said nucleic acid is at least 95% identical to said reference nucleic acid.

207. The isolated polynucleotide of claim 206, wherein said nucleic acid encodes at least 30 contiguous amino acids from 1 to 360 of SEQ ID NO:2.

208. The isolated polynucleotide of claim 206, wherein said reference nucleic acid encodes at least 50 contiguous amino acids from 1 to 360 of SEQ ID NO:2.

209. The isolated polynucleotide of claim 208, wherein said nucleic acid encodes at least 50 contiguous amino acids from 1 to 360 of SEQ ID NO:2.

210. The isolated polynucleotide of claim 205, wherein said nucleic acid encodes a polypeptide which binds a TNF ligand.

211. The isolated polynucleotide of claim 205, wherein said nucleic acid encodes a polypeptide which induces apoptosis.

212. The isolated polynucleotide of claim 205, further comprising a heterologous polynucleotide.

213. The isolated polynucleotide of claim 212, wherein said heterologous polynucleotide encodes a heterologous polypeptide.

214. The isolated polynucleotide of claim 213, wherein said heterologous polypeptide comprises an immunoglobulin Fc region.



215. The isolated polynucleotide of claim 214, wherein said immunoglobulin Fc region is a human immunoglobulin Fc region.

216. A method of producing a vector that comprises inserting the isolated polynucleotide of claim 205 into a vector.

217. A vector comprising the isolated polynucleotide of claim 205.

218. The vector of claim 217, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

219. A host cell comprising the isolated polynucleotide of claim 205.

220. The host cell of claim 219, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.

221. A host cell comprising the isolated polynucleotide of claim 210.

222. The host cell of claim 221, wherein said isolated polynucleotide is operably associated with a heterologous regulatory sequence.